UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX – PACIFIC SOUTHWEST REGION
75 Hawthorne Street
San Francisco, CA 94105-3901

NOV 25 2019

Ms. Diana Lang
BETA Operating Company, LLC
111 W. Ocean Blvd. Suite 1240
Long Beach, CA 90802

Dear Ms. Lang:

Enclosed is the inspection report for EPA's Clean Water Act compliance inspection of BETA's Platform Eureka NPDES General Permit No. CAG280000 conducted on September 24, 2019.

EPA identified the following area of concern for the platform during the inspection:

1. In order the comply with the Permit, Discharge 003 volumes need to be measured, recorded, and reported on DMRs.

Please review this report. Contact EPA within 14 calendar days of receipt of this letter if any factual disputes are identified. Provide a written response to the area of concern noted above within 45 calendar days of receipt of this letter. Send your response to Adam Howell of my staff at howell.adam@epa.gov (415) 947-4248. Thank you for your cooperation and the cooperation of your staff during the inspection.

Sincerely,

Eric Magnan
Manager, Wastewater Section
Enforcement Division

Cc: Alexander Smith, BETA
James Salmon, BSEE

EPA United States Environmental Protection Agency

Region 9 Enforcement Division
75 Hawthorne Street
San Francisco, CA 94105

Inspection Date(s):	September 24, 2019		
Time:	**Entry:** 8:40 am	**Exit:** 2:15 pm	
Media:	Water		
Regulatory Program(s)	Clean Water Act NPDES		
Company Name:	BETA Offshore		
Facility or Site Name:	Platform Eureka		
Facility/Site Physical Location:	Platform Eureka, Offshore Long Beach, Pacific Ocean Lease OCS-P-0301		
Geographic Coordinates:	Latitude: 33°33'49.61"N, Longitude: 118° 6'59.38"W		
Mailing address:	111 W. Ocean Blvd. Suite 1240 Long Beach, CA 90802		
Facility/Site Contact:	Diana Lang	**Title**: HSE Manager	
	Phone: 562-628-1529	**Email**: dlang@memorialpp.com	
Facility/Site Identifier:	NPDES Permits CAG280000 and CAF001149		
NAICS:	211111 - Crude petroleum and natural gas extraction		
SIC:	1311		
Facility/Site Personnel Participating in Inspection:			
Name	Affiliation	Title	Email
Diana Lang	BETA offshore	HSE Manager	dlang@memorialpp.com
Alexander Vasquez	BETA offshore	Lead Operator	avasquez@memorialpp.com
EPA Inspector(s):			
Adam Howell	US EPA	Environmental Engineer	Howell.Adam@epa.gov
Michael Weiss	US EPA	Environmental Engineer	Weiss.Michael@epa.gov
Inspection Report Author:	Adam Howell		415-947-4248
			Date: 11/25/2019
Supervisor Review:	Eric Magnan		415-947-4179
			Date: 11-22-19

SECTION I – INTRODUCTION

I.1 Purpose of the Inspection

On September 24, 2019, Adam Howell and Michael Weiss from the U.S. EPA Region 9 Enforcement Division (hereafter, we or inspection team) conducted a Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) inspection of the BETA Offshore (BETA or Discharger) – Platform Eureka (hereafter, Facility or Platform) offshore oil and gas platform. The purpose of the inspection was to evaluate compliance with the requirements of the EPA Region 9 NPDES Permit Nos. CAG280000 and CAF001149 (hereafter, Permit).

During the inspection we evaluated the accuracy and reliability of the Discharger's self-monitoring and reporting program and the Facility onsite generated waste streams, treatment processes, and discharges to the Pacific Ocean. The announced inspection consisted of two parts: a records review and a general Facility walk through. The onsite Facility Representatives were Diana Lang (HSE Manager, BETA), and Alexander Vasquez (Lead Operator). Upon arriving at the Platform on September 24, 2019, we met with the Facility Representatives, and presented our CWA credentials and explained the purpose of the inspection.

SECTION II – FACILITY / SITE DESCRIPTION

II.1 Facility Description

Platform Eureka is located offshore of Long Beach, CA and produces oil and gas from Lease OCS-P-0301. The Platform was first installed in July 1984 and began production in March 1985. Platform Eureka is approximately 9.0 miles from land in federal waters, has 60 well slots, and is at a water depth of 700 feet. As of October 1, 2017, Platform Eureka had a cumulative oil production of 44,860,000 bbls (barrels) and cumulative gas production of 10,162,000 mcf (thousand cubic feet).

At the time of the inspection, the Facility was in "production" operations, actively recovering hydrocarbons from the field formation. A Facility Representative stated that at the time of the inspection, the following NPDES discharges occur or may occur from the Facility:

- Produced Water (Discharge 002) – Sent to Platform Ellen
- Well Treatment Completion and Workover Fluids (Discharge 003) – Commingled with Produced Water
- Deck drainage (washdown, rainwater, drip pan and work area drains – Discharge 004) – Pumped to a disposal well
- Sanitary and Domestic Wastes (Discharge 005) – Pumped to a disposal well
- Fire control system water (Discharge 008) – Pumped to a disposal well
- Non-contact Cooling Water (Discharge 009)

Platform Eureka is connected to Platform Elly by a pipeline carrying gross product commingled with any well treatment, completion and workover fluids.

II.2 Wastewater Sources

Note the discharge number (i.e., Discharge 002) referenced throughout this report refers to the type of wastewater discharged at the corresponding outfall point as designated in the Permit. A general description of the process train(s) for each of the above-mentioned discharges, and additional fluids that may be generated at the Facility is described below:

Produced Water (Discharge 002) is a by-product of crude oil and natural gas extraction on Platform Eureka. Produced water is commingled with graywater and other sources and sent to Platform Elly (through Platform Ellen) for treatment and discharge. Some treated produced water is returned to Platform Eureka for injection into the geological formation, but no produced water is discharged directly at Platform Eureka. Platform Elly has a maximum annual allowable produced water discharge of 10,950,000 bbls. Platform Elly has monitoring requirements for produced water for oil & grease (daily), toxicity (quarterly) and zinc (annually). The Permit sets limits on oil & grease concentrations in discharged produced water of 29 mg/l monthly average and 42 mg/l daily maximum.

Well Treatment Completion and Workover Fluids (Discharge 003) are commingled with produced water, then sent to Platform Ellen and commingled with produced water from that Facility and then sent to Platform Elly for treatment.

Deck drainage (washdown, rainwater, drip pan and work area drains – Discharge 004) is collected throughout the platform. The top most platform level (Drill Deck) and next level (Production Deck) are enclosed with berms and floor trenches that flow to the sump tank on the Subdeck. Fluid in the sump tank is pumped to a disposal well. If the deck drainage flows ever exceed the capacity of the sump, additional flows can be stored in the emergency sump (Photograph 1). Mr. Vasquez stated that the Facility never has to discharge deck drainage.

Sanitary Wastewater (Discharge 005) is treated onsite at the Facility with an Omnipure environmental marine sanitation device (MSD) Model No. 12MXMP with serial No. 15-12MXMP-D033301B, which is United States Coast Guard (USCG) approved (Photograph 2). Samples are collected daily from a sample port on the downstream end of the Omnipure (Photograph 3) and tested for residual chlorine. The treated water is pumped to a disposal well. The onsite Facility representatives stated that the daily discharge water flow rate is estimated based on the number of people on the platform and the time spent per person. The MSD unit is sized for a maximum of 7,500 gallons per day (gpd). Domestic wastes (i.e. laundry water) are commingled with deck drainage and sent to a disposal well.

Fire control system water (seawater released during training, testing, and maintenance of fire protection equipment – Discharge 008) is composed of pure seawater. The Fire control water is sent to a disposal well with the deck drainage (Discharge 004).

Non-contact Cooling Water (Discharge 009), originates as seawater. Operators inject liquid sodium hypochlorite as a biofilm inhibitor until chlorine concentrations are between 0.2 – 0.5ppm before using it to cool rig engines. The schematic in Photograph 4 shows how seawater is pumped through the Platform and then discharged through 10" diameter pipes at a constant flow rate of 68,571BWD (Barrels of Water per Day). Chlorine residual concentrations are monitored and reported on DMRs.

II.3 Wastewater Treatment

Sanitary wastewater (Discharge 005) is the only wastewater stream to be treated onsite at the Facility. Discharge 005 is treated with an Omnipure MSD (Photograph 2). The self-contained treatment system oxidizes and disinfects sewage by combining it with seawater and electrolyzing the combination in an electrochemical cell which produces hypochlorite for disinfection. Facility personnel stated that the MSD is manually backwashed twice weekly (backwash is sent to deck drainage) and inspected annually by a contractor.

Domestic and Sanitary Wastes (Discharge 005), Footnote 2, of the Permit states "any facility which properly operates and maintains a marine sanitation device (MSD) that was certified by the United States Coast Guard (USCG) under Section 312 of the Act shall be deemed to be in compliance with permit limitations for sanitary wastes and the requirements for total residual chlorine do not apply."

Produced water (Discharge 002) is treated on Platform Elly using a three-step separation process. Treatment consists of a free-water knockout to separate water from oil and gas, a heater treater for further separation, and then a flotation cell (WEMCO model 120). After being separated, produced water volumes in excess of what can be injected into the geologic formation from Platforms Ellen or Eureka are discharged from Platform Elly.

II.4 Compliance History

EPA staff performed Clean Water Act compliance inspections on Platforms Elly and Eureka in March, 2017. The inspection team found issues related to BETA's monitoring and sampling methodology, notably for oil & grease. Solutions for those issues were negotiated with BETA and memorialized in an Administrative Order on Consent (AOC) with Docket No. CWA-309-2018-0002 and effective on April 10, 2018.

The AOC was an agreement between BETA and EPA to rewrite and implement the sampling protocol for produced water discharges on their platforms and resolve NPDES violations on Platform Elly.

Discharge Monitoring Reports (DMRs) for Platform Eureka reviewed by the inspection team indicated no reported effluent violations during the period of review (July 2016 through July

2019). DMRs also indicated that well treatment and workover fluids (Discharge 003) were generated on Platform Eureka eleven times during the same time period. These fluids were generated during the months of July 2016, March 2017, May 2017, August 2018, December 2018, January 2019, and February 2019 and sent to Platform Elly to be commingled with produced water and treated.

Well Treatment, Completion and Workover Fluids (Discharge 003), Footnote 2, of the Permit states, "If well treatment, completion or workover fluids are commingled with produced water, then effluent limitations and monitoring requirements for produced water apply. In addition, for a commingled discharge, the discharge volume of produced water and the discharge volume of well treatment, completion and workover fluids shall both be reported. However, no discharge volumes of well treatment, completion and workover fluids were reported on DMRs for Platform Eureka, or Platform Elly during the period of review. A no discharge code (NODI C) was reported for every month instead.

DMRs for Platform Elly for the same time period reviewed by the inspection team indicated produced water (Discharge 002) effluent limit violations for oil & grease for the months of July 2015 (monthly average concentration) and August 2016 (monthly average and daily maximum concentrations). These violations were addressed under the April 2018 AOC.

The AOC was terminated on June 7, 2018 when EPA determined that BETA had substantially met all the requirements of the AOC.

SECTION III – OBSERVATIONS

- The NPDES permit, daily reports, and DMRs were all well organized and readily available on an electronic share drive accessible on the Platform. Daily log sheets were clear, well kept, and easy to understand.

- The Facility appears to be generally well maintained and clean. Paint was fresh in many areas and corrosion kept to a minimum given the conditions. Deck drains appeared sound.

- The Omnipure MSD appeared to be in good working order.

SECTION IV – AREAS OF CONCERN

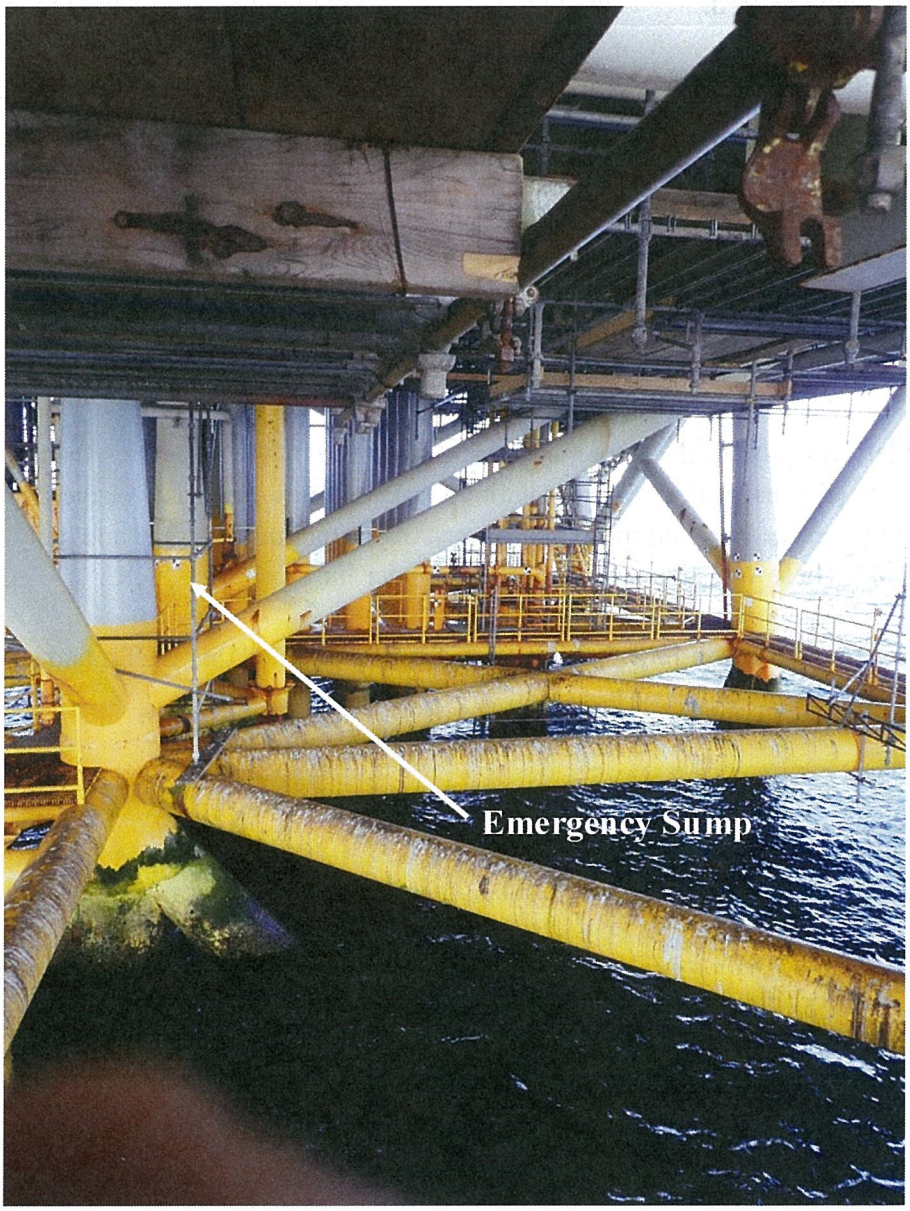
The presentation of areas of concern does not constitute a formal compliance determination or violation.

1. In order the comply with the Permit, Discharge 003 volumes need to be measured, recorded, and reported on DMRs.

APPENDICES

Appendix 1 – Photograph Log

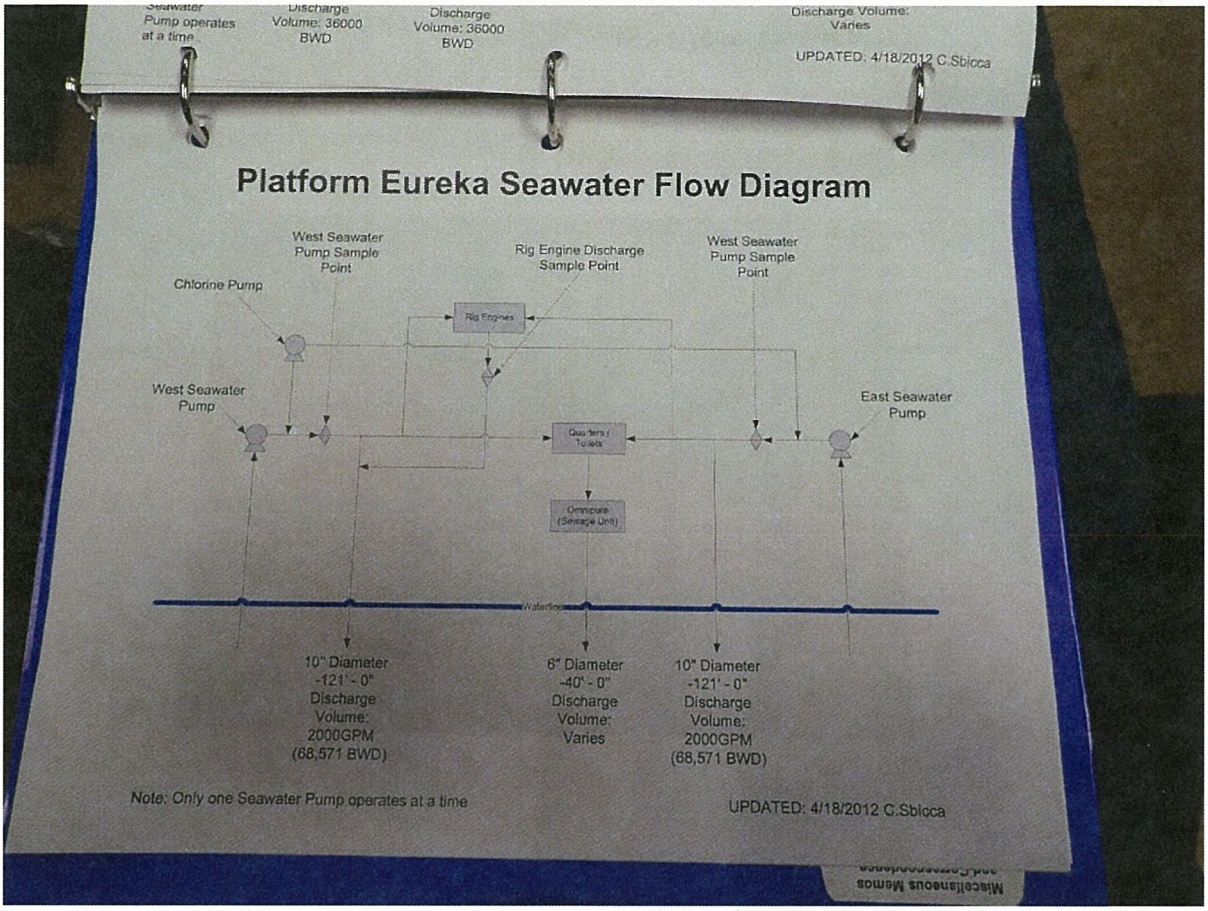
The photographs were taken during the inspection by Michael Weiss using an Olympus Tough TG-5 Digital Camera. Original copies of the photos are maintained by EPA Region 9.



Photograph 1: Subdeck structure with emergency sump visible in background..

Photograph 2: Omnipure marine sanitation device.

Photograph 3: Sampling port for discharge from the Omnipure treatment system.



Photograph 4: Platform Eureka Seawater Flow Diagram.